Applicants provisionally elect, with traverse, Group II, drawn to an antibody or fragment thereof. Applicants also elect the species, where the antibody can act as an antagonist.

Applicants traverse the Restriction Requirement on the grounds that a search for the novelty of the antibody of Group II (polyclonal antibody (claim 2); monoclonal antibody (claim 3); agonistic antibody (claim 5); and antagonistic antibody (claim 6); etc.) would yield information regarding the novelty of an invention encompassed by Group I, i.e., an anti-idiotypic antibody that specifically binds to 499E9.

The Examiner stated that the "structures and modes of action" of an antibody and anti-idiotypic antibody are different (page 2 of Office Action). Applicants do not agree. Although all antibodies, within a given subclass, differ in structure in their hypervariable regions, they need not differ in their variable region, and generally do not differ in their constant region. It is commonplace for patents to claim monoclonal antibodies, without limiting the claim to one particular clone. It is also commonplace for patents to claim polyclonal antibodies, even though it is well known that these encompass many variations within a particular antibody subclass, as well as antibodies in multiple subclasses.

The Examiner stated that an antibody is different from an anti-idiotypic antibody because the anti-idiotypic antibody "can potentially serve as . . . a co-receptor" (page 1 of Office Action). Applicants cannot agree. Receptors are proteins used to bind a ligand and transmit a signal. Receptors often are membrane-bound proteins; see generally, e.g., Conn (1993) Receptors: Molecular Biology, Receptor Subclasses, Localization, and Ligand Design, Academic Press, Inc., San Diego; Venter and Harrison (1984) Membranes, Detergents, and Receptor Solubilization, Alan R. Liss, Inc., N.Y. According to Lodish, et al. (2000), a receptor is a protein that exhibits "ligand-binding and effector specificity" where "binding of a ligand to its receptor causes a conformational change . . . leading to a specific cellular response" (Lodish, et al. (2000) Molecular Cell Biology, 4th ed., W.H. Freeman and Co., N.Y., p. 850). According to Alberts et al. (1994), a receptor "specifically binds the signaling molecule and then initiates a response in the target cell" (Alberts, et al., Molecular Biology of the Cell, 3rd ed., Garland Publishing, Inc., N.Y., p. 722).

Applicants conclude that there is nothing to suggest that the contemplated

antibody or anti-idiotypic antibody is used to bind a ligand and transmit a signal. There is nothing to suggest that the contemplated antibody or anti-idiotypic antibody is membrane-bound. Applicants conclude that there is nothing in the specification that distinguished Groups I from that of Group II, on the basis of relating to "co-receptor" or to "receptor."

The Examiner also stated that an antibody is different from an anti-idiotypic antibody because the "the anti-idiotypic antibody can potentially serve as an antigen." (page 1 of Office Action). Applicants cannot agree. All classes of polypeptides, including hormones, enzymes, receptors, synthetic polypeptides, antibodies, and anti-idiotypic antibodies can potentially serve as an antigen. A polypeptide can be used to raise antibodies. An antibody can be used to raise anti-idiotypic antibodies. And anti-idiotypic antibodies can be used to raise anti-*anti*-idiotypic antibodies (Perosa, et al., J. Immunol. 156, 3563 (1996); Clark, Immunol. Today 21, 397 (2000) (enclosed)).

Additionally, applicants point out that antibodies and anti-idiotypic antibodies share the same protein structure (Fig. 10-15 in Abbas, et al. (2000) Cellular and Molecular Immunology, 4th ed., W.B. Saunders Co., N.Y., p 230 (enclosed)). In short, both types of antibody have a constant region, hinge region, and variable region. Both types of antibody have two heavy chains and two light chains.

Applicants believe that nothing in the prior art suggests that antibodies and anti-idiotypic antibodies, *per se*, have different structures or function differently as an antigen. Applicants therefore conclude that Groups I cannot be distinguished from that of Group II, on the basis of antigenicity.

In view of the foregoing, Applicants contend that examination of Groups I and II together would not be a serious burden on the Examiner. Applicants request the claims encompassed by Groups I and II (Claims 1-10) be rejoined and examined together.